Ericsson Ref. No.: P12585-US1 Application Serial No.09/779,937

Amendments to the Claims

 (Currently amended) A method for allowing a GPS receiver and a cellular telephone transceiver to share a common antenna comprising the steps of:

coupling said GPS receiver and said cellular telephone transceiver to said antenna; and disconnecting said GPS receiver from said antenna and connecting said GPS receiver to ground when said cellular telephone transceiver is transmitting.

2. (Currently Amended) The method of claim 1 wherein said disconnecting step comprises the steps of:

providing a signal indicating when said cellular telephone transceiver is transmitting; and

GPS receiver from said antenna and connect said GPS receiver to ground.; and using said switch, switching said GPS receiver from said antenna to ground.

- 3. (Original) The method of claim 1 wherein said antenna is a triple band antenna.
- 4. (Original) The method of claim 3 wherein said triple band antenna is tuned to the transmit and receive frequencies of said cellular telephone transceiver and the receive frequency of said GPS receiver.
- 5. (Original) The method of claim 1 further comprising the steps of:

causing said cellular telephone transceiver to provide a signal to said GPS receiver when said cellular telephone transceiver ceases transmitting; and causing said GPS receiver to begin searching for satellite signals when said signal is received.

6. (Currently Amended) In a cellular telephone having a GPS receiver and a triple band antenna, an improvement comprising:

a switch, connecting said GPS receiver and said antenna;

wherein said switch disconnects said GPS receiver from said antenna when said cellular controlled by a signal from said cellular telephone is transmitting:

a connection between said cellular telephone and said GPS receiver for transmitting information from said cellular telephone to said GPS receiver regarding a predefined cellular telephone transmission time period; and

means, in said GPS receiver, for delaying the start of a satellite search until the end of said predefined cellular telephone transmission time period.

7. (Cancelled)

8. (Original) A method for improving the performance of a cellular telephone equipped with a GPS receiver comprising the steps of:

providing a triple band antenna;

providing a diversity antenna for said GPS receiver;

providing a controllable switch capable of switching said GPS between said triple band

antenna and said diversity antenna; and

switching said GPS receiver from said triple band antenna to said diversity antenna when said cellular telephone is transmitting.

Ericsson Ref. No.: P12585-US1 Application Serial No.09/779,937

- 9. (Original) The method of claim 8 wherein said switching step includes the steps of: causing said cellular telephone to provide a signal to said GPS receiver when said cellular telephone transceiver ceases transmitting; and causing said GPS receiver to delay searching for satellite signals until said signal is received.
- 10. (Original) The method of claim 8 further comprising the steps of: monitoring the strength of GPS signals received on said triple band antenna and on said diversity antenna; and switching said GPS receiver the antenna with the stronger signal.
- 11. (Original) The method of claim 10 wherein said switching step comprises the steps of: providing a first signal when said cellular telephone is transmitting; providing a second signal when said GPS receiver receives a stronger signal from said diversity antenna; and logically ORing said first and said second signals to determine when said GPS receiver should be switched to said diversity antenna.
- 12. (Original) The method of claim 11 further comprising the steps of: causing said cellular telephone to provide a signal to said GPS receiver when said cellular telephone transceiver ceases transmitting; and causing said GPS receiver to delay searching for satellite signals until said signal is received.

Ericsson Ref. No.: P12585-US1 Application Serial No.09/779,937

13. (Original) In a cellular telephone equipped with a GPS receiver and a triple band antenna, an improvement comprising:

a switch; and

a diversity antenna, coupled to said GPS receiver through said switch; wherein said switch switches said GPS receiver from said triple band antenna to said diversity antenna when said cellular telephone is transmitting.

14. (Currently Amended) The improvement of claim 13 wherein said switch is controllable and further comprising:

circuitry for controlling said switch;

wherein said circuitry is coupled to said cellular telephone and further wherein said circuitry receives a signal from said cellular telephone when said cellular telephone is transmitting[[;]].

- 15. (Original) The improvement of claim 14 wherein said GPS receiver is coupled to said cellular telephone and further comprising means, in said GPS receiver, for delaying the start of a satellite search until the end of said period of transmission of said cellular telephone.
- 16. (Original) The improvement of claim 15 further comprising:

circuitry, coupled to said GPS receiver, for comparing the strength of signals received from both said triple band antenna and said diversity antenna;

wherein said circuitry for controlling said switch causes said GPS receiver to switch from said triple band antenna to said diversity antenna when said cellular telephone is transmitting or when said signal strength from said diversity antenna is stronger than said signal strength from said triple band antenna.